



**American Diesel Training Centers  
2773 Westbelt Drive, Suite B  
Columbus, OH 43228  
Course Catalog  
2/1/2022  
OBCCS # 2120**

### **2022 School Calendar**

Term 1: 1/3-2/4  
Term 2: 2/7-3/11  
Term 3: 3/14-4/15  
Term 4: 4/18-5/20  
Term 5: 5/23-6/24  
Term 6: 6/27-7/29  
Term 7: 8/1-9/3  
Term 8: 9/6-10/7  
Term 9: 10/10-11/11  
Term 10: 11/14-12/16

Legal Holidays:

Memorial Day: May 30, 2022

Independence Day: July 4, 2022

Labor Day: September 5, 2022

Thanksgiving: November 24-25, 2022

Christmas: Dec. 26, 2022

### **Tuition Refund Policy**

ADTC does not charge a materials fee.

Refunds for books, supplies and consumable fees shall be made in accordance with Ohio Administrative Code section 3332-1-10.1. There is one academic term for this program that is 250 clock hours in length. Refunds for tuition and refundable fees shall be made in accordance with following provisions as established by Ohio Administrative Code section 3332-1-10:

- (1) A student who withdraws before the first class and after the 5-day cancellation period shall not be obligated for the materials fee.
- (2) A student who starts class and withdraws before the academic term is 15% completed will not be obligated for the tuition or materials fee.
- (3) A student who starts class and withdraws after the academic term is 15% but before the academic term is 25% completed will not be obligated for the tuition but is obligated for the materials fee.
- (4) A student who starts class and withdraws after the academic term is 25% complete but before the academic term is 40% completed will not be obligated for the tuition but will be obligated for the materials fee.
- (5) A student who starts class and withdraws after the academic term is 40% will not be obligated for the tuition, but will be obligated for the materials fee.

## **Enrollment Dates:**

ADTC has rolling enrollment dates, meaning students can enroll in any of our nine terms at any time capacity allows.

## **Entrance Requirements**

- High School Diploma, GED or Applicable work experience
- Completion of on-line application
- Personal interview
- Completion of mechanical aptitude test.

**American Diesel Training Centers is a selective program. Applicants will be chosen based on their chances to successfully complete our rigorous program. Not all applicants will be accepted.**

## **Student Leave, Absences, Tardiness and Makeup Work**

Due to the intensive nature and compressed timeframe of the training, student absences will not be tolerated, except in the following situations.

- Signed Dr's excuse
- Death in the family
- Documented evidence of family or personal challenges
- Military deployment
- Religious observances

Due to the fact that one of ADTC's services to its employer clients is the 250 hour vetting process their potential employees undergo, students must understand that ADTC will not tolerate what employers do not tolerate.

In the case that a student misses multiple excused days, ADTC will attempt to accommodate that student by allowing make-up work or placing them in a subsequent term, where they can fully complete the program.

## **Removal from the Program**

In the event a student is not satisfactorily progressing to program completion or has multiple unexcused absences, ADTC reserves the right to remove them from the

program. In this case, the student will receive fee refund based on Ohio Administrative Code section 3332-1-10.1 schedule.

## **Grading System**

At ADTC we have two grading systems:

1. **Subject matter theory.** This is online work that students must complete before progressing to hands on work in the shop. All work will be recorded and tracked in an on-line learning management system and students will be assessed using pass-fail methodology. Students will not be permitted to move to hands on-training unless they have passed their theory portion of the subject matter.
2. **Hands on Task Training:** Students are expected to successfully complete more than 300 hands on tasks. Each task will be visually assessed by an instructor subject matter expert and students will be assessed using the following rubric.
  - **Mastery:** Student performed procedure flawlessly to satisfaction of assessor.
  - **Competency:** Student completed procedure but has room for improvement.
  - **Needs Remediation:** Student was unable to successfully complete procedure.

## **Scoring and Tracking**

Each student will be scored using a computer based application that feeds back into a grade book. Students will not be allowed to complete the program until they prove mastery on each of the tasks.

## **Description of Content of Program**

- Define and describe classification of medium and heavy-duty vehicles according to application, weight, length, and axle configuration. (Ch. 1)
- Decode a North American VIN (Ch. 1)
- Identify career paths in a commercial vehicle shop. (Ch. 2)
- Use effective strategies for listening. (Ch. 2)
- Use effective strategies for speaking. (Ch. 2)
- Use effective strategies for reading. (Ch. 2)
- Use a service information program while conducting a service or repair. (Ch. 2)

- Use effective strategies for writing, including completing a repair order, a shop or equipment inspection sheet, an accident report, and a vehicle inspection form. (Ch. 2)
- Use a shop/repair manual while conducting a service or repair. (Ch. 2)
- Use a labor guide to estimate the cost or charge of conducting a service or repair. (Ch. 2)Skill Drill 2-1
- Use a parts program to identify and order the correct replacement parts for a service or repair.(Ch. 2)Skill Drill 2-2
- Use a repair/work order to identify the information needed and the service requested. (Ch. 2)Skill Drill 2-3
- Use service history in the repair and service of vehicles. (Ch. 2)Skill Drill 2-4
- Use an owner's manual to obtain vehicle information (Ch. 2)
- Describe how to follow safe practices in the workplace. (Ch. 3)
- Describe how the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) impact the workplace. (Ch. 3)
- Describe the difference between a shop policy and a shop procedure. (Ch. 3)
- Explain how shop policies, procedures, and safety inspections make the workplace safer. (Ch. 3)
- Describe how to identify hazardous environments and the safety precautions that should be undertaken in hazardous environments. (Ch. 3)
- Explain how the shop layout contributes to efficiency and safety. (Ch. 3)
- Identify workplace safety signs and their meanings. (Ch. 3)
- Describe the standard safety equipment that should be in the workplace. (Ch. 3)
- Describe how to maintain a safe level of air quality in the workplace. (Ch. 3)
- Describe the safety precautions to be taken when working with electrical tools and equipment. (Ch. 3)
- Describe how to reduce the risk of fires in the shop. (Ch. 3)
- Discuss basic tool preparation and safety. (Ch. 4)
- Discuss tools and equipment fundamentals. (Ch. 4)
- Discuss tool location. (Ch. 4)
- List and describe precision measuring tools. (Ch. 4)
- List and describe power tools. (Ch. 4)
- List and describe air tools. (Ch. 4)
- List and describe common shop tools. (Ch. 4)
- List and describe diagnostic equipment. (Ch. 4)
- List and describe servicing equipment. (Ch. 4)
- List and describe cleaning equipment. (Ch. 4)
- List and describe electrical equipment. (Ch. 4)
- Identify fluids and lubricants commonly used in the industry. (Ch. 4)
- Identify locking devices and tools. (Ch. 5)
- Describe fasteners and torque. (Ch. 5)
- Identify locking device measuring tools. (Ch. 5)
- Use a torque wrench and torque angle gauge. (Ch. 5)Skill Drill 5-1
- Lift and secure a vehicle with a vehicle floor jack and stands. (Ch. 5)Skill Drill 5-8
- Identify locking pins and keys. (Ch. 5)
- Discuss the design and function of lip-type seals. (Ch. 5)
- Discuss the design and function of ring seals. (Ch. 5)
- Discuss the design and function of mechanical seals. (Ch. 5)
- Describe the correct procedure for manual lifting. (Ch. 5)

## **COURSE OBJECTIVES cont.**

Upon completing this course, you will be able to:

- Describe the application and purpose of lifting equipment. (Ch. 5)
- Describe the safe use of lifting equipment. (Ch. 5)

- Identify types of lifting and moving equipment. (Ch. 5)
- Know how to use lifting equipment. (Ch. 5)
- Define and explain concepts of voltage amperage and resistance. (Ch. 6)
- Calculate the energy concepts of voltage amperage and resistance (Ch. 6)
- Predict the effect of resistance on voltage and amperage in a circuit. (Ch. 6)
- Predict the effects of increasing voltage and amperage in a circuit. (Ch. 6)
- Explain the relationship between voltage amperage and resistance. (Ch. 6)
- Describe the differences between alternating and direct current. (Ch. 6)
- Define and describe types of electric circuits. (Ch. 8)
- Describe the behavior of current flow in each type of electric circuit. (Ch. 8)
- Identify and describe electrical circuit failures. (Ch. 8)
- Describe the relationship between voltage amperage power and resistance in electrical circuits. (Ch. 8)
- Identify and describe types of circuit protection devices. (Ch. 8)
- Recommend wire gauge size for use in DC circuits. (Ch. 8)
- Identify factors causing voltage drop in electrical circuits. (Ch. 8)
- Describe virtual circuit protection and e-fuses. (Ch. 8)
- Classify and describe switches. (Ch. 9)
- Define and describe common types of circuit control devices. (Ch. 9)
- Identify and describe fixed and variable types of resistors. (Ch. 9)
- Identify and describe the operation of solenoids, capacitors, and relays. (Ch. 9)
- Identify standardized pin numbers of electrical relays. (Ch. 9)
- Recommend techniques used to test circuit control devices. (Ch. 9)
- Describe and explain the operation and construction of semiconductors. (Ch. 9)
- Classify diodes and transistors according to function. (Ch. 9)
- Identify and describe types of integrated circuit components. (Ch. 9)
- Classify and identify the applications of electrical test instruments used in commercial vehicle service. (Ch. 10)
- Identify and describe the operation of handheld electronic test equipment and accessories used to perform basic electrical measurements. (Ch. 10)
- Identify and explain safe work practices used during measurement and testing of electrical circuits. (Ch. 10)
- Describe the set-up of a digital multimeter (DMM) and procedures for performing basic electrical measurements. (Ch. 10)
- Describe safety procedures used to operate handheld test equipment in a safe manner. (Ch. 10)
- Describe the purpose and applications of batteries. (Ch. 11)
- Identify and describe the construction and types of lead–acid batteries. (Ch. 11)
- Identify and describe the features of lithium, nickel-cadmium, and nickel-metal hydride batteries as well as ultra-capacitors. (Ch. 11)
- Identify and describe the purpose, operation, and application of battery types. (Ch. 11)
- Define battery terminology and explain battery ratings. (Ch. 11)
- Recommend the correct size, type, and rating of replacement batteries. (Ch. 11)
- Identify and explain chemical reactions in lead–acid batteries during charging and discharging. (Ch. 11)
- Inspect, clean, fill, or replace the battery, battery cables, clamps, connectors, hold-downs, and battery boxes. (Ch. 13)Skill Drill 13-1
- Perform a battery state of charge test. (Ch. 13)Skill Drill 13-2
- Perform a conductance test on a battery. (Ch. 13)Skill Drill 13-3
- Perform a load test on a battery. (Ch. 13)Skill Drill 13-4
- Charge a commercial battery. (Ch. 13)Skill Drill 13-5
- Jump-start a commercial vehicle. (Ch. 13)Skill Drill 13-6
- Identify and test a low-voltage disconnect. (Ch. 13)Skill Drill 13-8

## COURSE OBJECTIVES cont.

- Strip wire insulation. (Ch. 16)
- Install a solderless terminal. (Ch. 16)
- Use wiring diagrams to diagnose electrical circuits. (Ch. 16)
- Identify a vehicle's optional and accessory electrical systems. (Ch. 17)
- Describe and explain network control of lighting circuits. (Ch. 17)
- Recommend service and maintenance practices for lighting circuits. (Ch. 17)
- Identify and describe various types of lighting technology used in commercial vehicles. (Ch. 17)
- Identify and describe commercial vehicle interior and exterior lighting circuits. (Ch. 17)
- Identify lighting standards for commercial vehicles. (Ch. 17)
- Categorize and describe failures in bulbs and lighting circuits. (Ch. 17)
- Identify and describe the operating strategies of electronic signal processing systems used in electrical system control on commercial vehicles. (Ch. 20)
- Identify and describe the functions, construction, and application of electronic sensors used to produce electrical signals for electronic control systems. (Ch. 20)
- Recommend and describe diagnostic procedures for sensors used in electronic control systems. (Ch. 20)
- Identify and describe legislative requirements of engine manufacturer's diagnostic and heavy-duty on-board diagnostic (HD-OBD) systems. (Ch. 22)
- Differentiate between on- and off-board diagnostics. (Ch. 22)
- Identify and describe features of on-board diagnostic (OBD) strategies. (Ch. 22)
- Identify and describe circuit monitoring strategies for out-of-range fault detection. (Ch. 22)
- Identify and describe principles of fault detection and diagnosis for commercial vehicle electronic control systems. (Ch. 22)
- Describe and explain standards for assigning fault codes to circuit faults. (Ch. 22)
- Identify potential causes or vibration complaints. (Ch. 23)
- Identify and analyze causes of tire failures. (Ch. 23)
- Interpret tire codes and other tire markings. (Ch. 23)
- Recommend tire re-grooving, retreading or replacement. (Ch. 23)
- Recommend tire maintenance practices and service intervals. (Ch. 23)
- Check and adjust the tire pressure. (Ch. 23)Skill Drill 23-1
- Check for tire wear patterns. (Ch. 23)Skill Drill 23-2
- Identify, inspect, or replace unitized/preset hub bearing assemblies. (Ch. 24)
- Clean, inspect, lubricate, and replace wheel bearings and races/cups; replace seals and wear rings; inspect spindle/tube; inspect and replace retaining hardware; adjust wheel bearings. Verify endplay with dial indicator. (Ch. 24)
- Inspect frame hangers, brackets and cross members in accordance with manufacturers' recommended procedures. (Ch. 26)
- Inspect frame and frame members for cracks, breaks, corrosion, distortion, elongated holes, looseness, and damage; determine needed repairs. (Ch. 26)
- Inspect a leaf spring system. (Ch. 27)Skill Drill 27-1
- Perform an in-service inspection of a suspension system. (Ch. 27)Skill Drill 27-2
- Inspect rear spring suspension components. (Ch. 27)Skill Drill 27-4
- Inspect rear beam suspension components. (Ch. 27)Skill Drill 27-5
- Inspect and maintain air spring systems. (Ch. 27)Skill Drill 27-6
- Inspect and maintain shock absorbers. (Ch. 27)Skill Drill 27-7
- Inspect and test an air suspension system and replace the levelling valve. (Ch. 27)Skill Drill 27-8

- Outline the advantages and disadvantages of using air brakes. (Ch. 30)
- List the four air brake circuits used in heavy-duty commercial vehicles. (Ch. 30)
- Identify and describe the categories of commercial vehicle air brake system circuits. (Ch. 30)
- Describe the purpose and operation of commercial vehicle air brake circuits. (Ch. 30)
- Identify minimum performance requirements for the air system according to FMVSS 121 standards. (Ch. 30)
- Identify and describe the air supply system's components and their functions. (Ch. 30)
- Identify and describe the air delivery and control systems' components and their functions. (Ch. 30)
- Identify and describe the operating factors affecting air brake system performance and efficiency. (Ch. 30)
- Identify and describe safety features of dual air brake system circuits and components. (Ch. 30)

## **COURSE OBJECTIVES cont.**

- Identify and describe the components of the park/emergency brake circuit and their functions. (Ch. 30)
- Identify and describe the components of the trailer air circuit and their functions. (Ch. 30)
- Check low air pressure warning devices. (Ch. 31)
- Record air governor cut-in and cut-out setting (psi or kPa). (Ch. 31)
- Check condition of air compressor. (Ch. 31)
- Identify reasons for excessive air buildup time. (Ch. 31)
- Test the anti-lock brake system with a chuff test. (Ch. 31)
- Test brake balance. (Ch. 31)
- Test air brake pressure balance. (Ch. 31)
- Test parking brake function. (Ch. 31)
- Inspect coupling air lines, holders, and gladhands. (Ch. 31)
- Check emergency (spring) brake control/modulator valve. (Ch. 31)
- Check tractor protection valve. (Ch. 31)
- Check operation of air dryer. (Ch. 31)
- Drain air tanks and check for contamination. (Ch. 31)
- Check condition of pressure relief (safety) valves. (Ch. 31)
- Check operation of air reservoir/tank drain valves. (Ch. 31)
- Identify air hose function by its color. (Ch. 31)
- Inspect air lines and hoses for damage. (Ch. 31)
- Test the automatic emergency brake system. (Ch. 31)
- Inspect air supply system performance. (Ch. 31)Skill Drill 31-1
- Test for air leakage. (Ch. 31)Skill Drill 31-2
- Check brake stroke length using applied stroke measurement. (Ch. 31)Skill Drill 31-3
- Inspect, test, and replace a spring brake actuator. (Ch. 31)Skill Drill 31-4
- Inspect and test the quick release valve. (Ch. 31)Skill Drill 31-6
- Inspect, test, and replace the brake application valve, fittings and mounts. (Ch. 31)Skill Drill 31-7
- Inspect, test, and replace a relay valve. (Ch. 31)Skill Drill 31-8
- Inspect, test, and replace the parking brake hand valve. (Ch. 31)Skill Drill 31-9
- Inspect and test the trailer brake control valve. (Ch. 31)Skill Drill 31-13
- Inspect, and test the tractor protection valve. (Ch. 31)Skill Drill 31-14
- Inspect and test the trailer brake full function valve. (Ch. 31)Skill Drill 31-15
- Inspect brake shoes. (Ch. 31)Skill Drill 31-16
- Remove brake shoes. (Ch. 31)Skill Drill 31-17
- Disassemble brakes. (Ch. 31)Skill Drill 31-18

- Install brake shoes. (Ch. 31)Skill Drill 31-19
- Remove the brake camshaft. (Ch. 31)Skill Drill 31-20
- Diagnose anti-lock brake system (ABS) electronic control(s) and components using self-diagnosis and/or electronic service tool(s); determine needed action. (Ch. 32), 1060
- Inspect, service, and/or adjust fifth wheel, pivot pins, bushings, locking mechanisms, and mounting hardware. (Ch. 34)
- Inspect and service landing gears. (Ch. 34)
- Lubricate the fifth wheel. (Ch. 34)Skill Drill 34-1
- Inspect the slider mechanism on the fifth wheel. (Ch. 34)Skill Drill 34-2
- Explain the principles of the heating, ventilation, and air-conditioning (HVAC) system. (Ch. 51)
- Describe air-conditioning components and operating principles. (Ch. 51)
- Identify and explain the three methods of heat transfer and how heat energy is measured. (Ch. 51)
- Describe the purpose and operation of heating system components. (Ch. 51)
- Explain the operation of rotary piston air compressors. (Ch. 51)
- Explain the operating principles of a cycling clutch orifice tube (CCOT) air-conditioning system. (Ch. 51)
- Explain the operating principles of a thermal expansion valve (TXV) air-conditioning system. (Ch. 51)
- Identify and explain the difference between an accumulator and a receiver/filter/drier. (Ch. 51)
- Explain the purpose of refrigerant and the refrigerant classification system. (Ch. 51)
- Identify the purpose and explain the function of refrigerant oil. (Ch. 51)
- Performance-test the air-conditioning system. (Ch. 52)Skill Drill 52-1

## **COURSE OBJECTIVES cont.**

- Inspect the evaporator housing water drain. (Ch. 52)Skill Drill 52-2
- Eliminate air-conditioning system odors. (Ch. 52)Skill Drill 52-3
- Identify refrigerant type. (Ch. 52)Skill Drill 52-4
- Perform a dye test to find a leak. (Ch. 52)Skill Drill 52-6
- Perform the reclaim process. (Ch. 52)Skill Drill 52-8
- Recycle refrigerant. (Ch. 52)Skill Drill 52-9
- Determine the need for an additional air-conditioning system filter, and perform necessary action. (Ch. 52)Skill Drill 52-10
- Remove, inspect, and reinstall the compressor. (Ch. 52)Skill Drill 52-12
- Remove and inspect air-conditioning mufflers, hoses, lines, and fittings. (Ch. 52)Skill Drill 52-13
- Use a vacuum gauge to evacuate an air-conditioning system. (Ch. 52)Skill Drill 52-18
- Use a micron gauge to evacuate an air-conditioning system. (Ch. 52)Skill Drill 52-19
- Add oil to the air-conditioning system. (Ch. 52)Skill Drill 52-20
- Describe the functions, construction, and application of diesel exhaust emission aftertreatment systems. (DE Ch. 33)
- Explain the principles of operation of diesel exhaust emission aftertreatment systems. (DE Ch. 33)
- Describe and explain methods for performing inspection and diagnostic procedures on diesel exhaust emission aftertreatment systems. (DE Ch. 33)
- Recommend maintenance or repairs on diesel exhaust emission aftertreatment systems. (DE Ch. 33)
- Perform an active regeneration procedure. (DE Ch. 33)Skill Drill 33-1
- Perform a forced DPF regeneration. (DE Ch. 33)Skill Drill 33-2
- Replace a DPF. (DE Ch. 33)Skill Drill 33-3

- List the general guidelines for conducting preventative maintenance inspections. (Ch. 55)Skill Drill 55-1
- Perform a walk-around inspection. (Ch. 55)Skill Drill 55-2
- Perform an in-cab inspection, including key-off inspection, key-on inspection, and engine-on inspection. (Ch. 55)Skill Drill 55-3
- Perform an internal key-on inspection. (Ch. 55)Skill Drill 55-4
- Perform an internal cab engine-on inspection. (Ch. 55)Skill Drill 55-5
- Perform a cab door inspection. (Ch. 55)Skill Drill 55-6
- Inspect body and component mountings. (Ch. 55)Skill Drill 55-7
- Inspect batteries and mountings. (Ch. 55)Skill Drill 55-8
- Inspect lines and mountings on fifth-wheel couplings. (Ch. 55)Skill Drill 55-9
- Inspect the vehicle frame and suspension and verify suspension ride height. (Ch. 55)Skill Drill 55-10
- Inspect the vehicle's electrical components, its exhaust system, and its lubrication system. (Ch. 55)Skill Drill 55-11
- Inspect hydraulic and air-over-hydraulic braking systems. (Ch. 55) Skill Drill 55-12
- Perform a full inspection of the vehicle's air brake systems. (Ch. 55) Skill Drill 55-13
- Inspect vehicle tires and wheels. (Ch. 55)Skill Drill 55-14
- Inspect the vehicle for proper wheel alignment. (Ch. 55)Skill Drill 55-15
- Inspect and check under-vehicle frame, its mountings, and electrical and exhaust components. (Ch. 55)Skill Drill 55-16
- Inspect the vehicle's transmission and drive train. (Ch. 55)Skill Drill 55-17
- Perform an engine-off engine compartment inspection. (Ch. 55) Skill Drill 55-18
- Inspect the steering and air-conditioning components during an engine-off engine compartment inspection. (Ch. 55)Skill Drill 55-19
- Inspect the fuel, intake, cooling, and cab-tilt systems during an engine-off engine compartment inspection. (Ch. 55)Skill Drill 55-20
- Inspect the vehicle for leaks, fluid levels, and operating systems during an engine-on engine compartment inspection. (Ch. 55)Skill Drill 55-21
- Develop resume writing skills

Obtain class 4 CDL license

## **Sequence of courses**

Since ADTC is a 250 hour full-time program, covering five weeks program. There is one course, covering all the topics listed above.

## **Course Descriptions with number of clock/credit hours.**

The below topics will be covered in a 5 week course.

This program prepares diesel technician students for entry level skills that are required to start a career in the diesel industry. The program focus will be an intense hands-on lab approach and perform most classroom work via online curriculum. The students will become proficient in preventative maintenance and inspections by performing procedures in electrical, brakes, lubrication, hub seals, HVAC, Aftertreatment systems, and diagnostics equipment. The students will be subjected to a work environment that will require them to adhere to all program guidelines and workplace practices to prepare them for industry partner placement.

Program guidelines and workplace practices include safety, personal protection equipment, first aid principles, employability skills, CDL level 4 license applications, and employment preparation.

**Note:** This program will provide necessary training and fundamentals required to fulfill an entry level diesel technician position throughout industry. This program includes hands on labs and some classroom lecture.

The Diesel Technician Program is laid out in eight sections:

**Foundation and Safety:** Units #1-5 covers the classification of heavy duty vehicles and provides students with the importance of shop safety, personal protection equipment, and principals of first aid. Students will learn employability skills, workplace habits, and tool and equipment fundamentals. Course guidelines and CDX curriculum used for this section.

**Electrical and Electronic Systems:** Units #6-20 covers principles of electricity, electric circuits, Electrical test instruments, vehicle batteries, starting systems, electrical wiring, body electrical systems, and sensors. Students will learn basic fundamentals of circuits utilizing an electrical trainer in the lab and then relate to vehicle. Students will identify applications of electrical test instruments used in commercial vehicle service and will test fusible links, circuit breakers, relays, solenoids, fuses; and replace as needed. Utilizing testing instruments the students will test batteries and perform any maintenance necessary. Students will use wiring diagrams to diagnose electrical circuits and be able to install solderless terminals. Students will utilize their knowledge of circuits and troubleshoot instrument gage problems and maintenance of sensors on a truck. Labs and CDX online curriculum used for this section.

**On-Board Diagnostics:** Unit #22 covers the use of relevant service information including diagnostic procedures utilizing a diagnostic scan tool. Students will interface with a vehicle's on-board computer and identify fault codes to determine needed action. Students will check and record electronic diagnostic codes; trip/operational data; monitor electronic data; clear codes; and determine further diagnosis. Labs utilizing Snap-on diagnostic scan tool/trainer and CDX curriculum used for this section.

**Tire, Suspension, and Brakes:** Unit #23-31 will cover inspection of tires for proper application (size, load range, position, and tread design) and determine needed action. Students will identify wheel/tire vibration, shimmy, and hop problems. Check operation of tire pressure monitoring system (TPMS) and determine needed action. Students will identify wear patterns; check tread depth and pressure; determine needed action. Removal of wheel/tire assemblies; torque mounting hardware to specifications with a torque wrench. Students will remove and replace wheel assembly; check wheel seal axle flange gasket for leaks and perform needed action. They will also clean, inspect, lubricate, and replace wheel bearings; replace seals and wear rings; inspect and replace retaining hardware; adjust drive axle wheel bearings. Students will verify end play using the dial indicator method. An in-service inspection of the suspension system will be performed along with a leaf spring inspection. Students will be able to explain the basic operation of brake systems that will lead into service, adjustment, and repair of foundation brakes. Labs and CDX online curriculum used for this section.

**Heating Ventilation and Air Conditioning:** Unit #51-52 will cover the principals, diagnosis, maintenance and repair of Heating Ventilation and Air Conditioning (HVAC). Students will identify type of system and conduct performance test(s) on HVAC systems; determine needed action. Students will Interface with vehicle's on-board computer and perform diagnostic procedures using Snap-On data scan tool. They will inspect, test, and adjust HVAC systems ducts, doors, and outlets; determine needed action. Students will identify causes of HVAC air and mechanical control problems; determine needed action. Labs and CDX online curriculum used for this section.

**Exhaust Aftertreatment Systems:** Unit #33 will cover the fundamentals of exhaust emission aftertreatment systems. Students will explain the principles of operation of diesel exhaust emission aftertreatment systems. Describe and explain methods for performing inspection and diagnosis procedures on diesel exhaust aftertreatment systems. Students will perform an active regenera

tion procedure and have necessary skills to replace a diesel particulate filter (DPF). Labs and CDX online curriculum used for this section.

**Preventative Maintenance and Inspection:** Unit #55 will cover the basis of establishing a preventative maintenance (PMI) schedule and practices. Students will identify items for an inspection checklist and develop and list the general guidelines for conducting preventative maintenance inspections. Students will perform a complete PMI inspection that will include: in-cab inspection, key-on inspection, engine-on inspection, a cab door inspection, body and component mountings, batteries and mountings, frame and suspension, electrical components, exhaust system, air brake systems, tires and wheels, and air-conditioning components. Students will become proficient in the requirements to perform a thorough PMI inspection required in the diesel service industry. Labs and CDX online curriculum used for this section.

**Employment Preparation/CDL License Application:** Students will undergo a resume writing session that will prepare them for employer placement. Students will also start the application process to obtain their Class 4 CDL license that will be required by employers. Students will have the availability to meet with Snap-On tool vendor to purchase required tools to enter the diesel technician industry.

### **Standards of Academic Progress for Purposes of Federal and State Financial Aid Programs.**

We do not accept Title IV funding.

### **Schedule of Fees, Charges for Student Tuition, Student Activities, Laboratory Fees, Rentals, Deposits, Late Fees, Interest Charges and all other charges imposed by the school.**

The cost of the ADTC program is \$10,000.

Students may pay cash. Or they may apply and be funded by 3<sup>rd</sup> party funding mechanism called the Career Impact bond by Social Finance, a Social Impact organization. [www.socialfinance.org](http://www.socialfinance.org)

Repayments are based on monthly reporting of income and are as follows.

- Less than \$30,000. No payment
- \$30,001-\$39,999: \$157/month for 48 months total
- \$40,000 and more. \$287/month for 48 months total

There is a 60 day grace period post program completion before payments commence.

### **Toolset:**

Students may elect to add the wholesale cost of a toolset (vital for employment) into their monthly payments at the following amounts.

-\$30,001-\$39,999: \$187/month for 48 months total

-\$40,000 and more: \$317/month for 48 months total

### **Granting of Credit for Previous Education, Training or Experience**

All students, regardless of experience are required to complete the program.

#### **Instructors-Administrators**

**Myron Benner**-Myron is the Director of Education at ADTC-Columbus. Myron is a graduate of Ohio Diesel Technical Institute and has more than 30 years of industry experience, including Kenworth, XPO logistics and Nichols Bakery. Myron has been our DOE since our founding in 2017.

**Paul Morton**-Paul is our lead instructor and has been with ADTC for three years. Paul is a graduate of The Ohio State University, with a BS in Career and Technical Education. Paul is also a graduate of Wyotech in Laramie, Wyoming. Prior to coming to ADTC, Paul was a client. He hired several ADTC graduates in his role as an area manager with Goodyear.

**John Austin**-John enrolled in the first ever (July, 2017) class at ADTC and was one of the top students in the class. He spent four years as a technician at Skinner Diesel Services in Columbus, OH, before returning to ADTC as an instructor.

**Nick Baughman**-Nick enrolled in the third class (January, 2018) at ADTC. Prior to attending ADTC, Nick had automotive and tire experience. After graduating from ADTC as top student in the class, Nick spent four years at the City of Columbus Maintenance Division and worked his way up to Foreman. He returned to ADTC in fall of 2022 as an instructor.

#### **Institutional Scholarship Award Plans or Institutional Grants.**

-None at this time

**Grievance Procedure, including right for student to contact State Board.**

-If student has particular grievance, a meeting will be arranged with the VP of Operations. If issue is unresolvable, student has option to leave program with full refund or continue in course. ADTC reserves the right to remove students at full refund who do not meet expectations.

Students may contact State Board of Career Colleges at 877-275-4219(Toll Free)  
30 East Broad Street, Suite 2481, Columbus, OH 43215